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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,724	12/26/2000	Scott Vanderlinde	279.341US1	4214

21186 7590 12/31/2002

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EXAMINER

YU, JEANNE C

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 12/31/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,724

Applicant(s)

VANDERLINDE ET AL.

Examiner

Jeanne Yu

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 6-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on December 26, 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Response to Amendment

Applicant's amendment to claim 8, in Paper No. 10, is acknowledged.

Election/Restrictions

Claims 15-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Paper No. 8.

Claims 6-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Paper No. 8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conley et al. USPN 6,353,761 B1 in view of Esler USPN 6,128,529.

1. Conley discloses a method of displaying markers on a strip chart recording representing sensing and pacing events spaced apart in accordance with their time sequence (Fig 5), wherein each marker indicates whether the event is a sense or a pace in which channel the event occurred (c 7, l 41-46). Conley further discloses a

method displaying an interval value with each rate channel marker indicating the time interval between the event represented by the marker and the preceding rate channel event (c 7, l 47-49), i.e., the time intervals representing the time difference between each atrial event marker. Conley, however, does not expressly disclose that the method displays an interval value with each synchronized channel marker indicating the time interval between the event represented by the marker and a nearest or nearest preceding rate channel event (claims 1 and 5). Esler discloses a timing diagram (Fig 1) that displays the time interval indicating the time interval between each ventricular event, or synchronized channel event, and a nearest and/or nearest preceding atrial event, or rate channel event, in the second row of time intervals. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the strip chart recording of Conley with the timing diagram of Esler. The motivation for doing so would have been to illustrate how seemingly tachyarrhythmia heart conditions, caused by pacing therapy programmed with fixed AV and VA time intervals, would be inappropriately treated with anti-tachyarrhythmia therapy (Esler, c 4, l 9-56). It would be difficult to know if rapid heart rate conditions were due to intrinsic heart activity or timed pacing therapy without the timing intervals at hand. Therefore, it would have been obvious to combine Esler with Conley to obtain the invention as specified in claims 1 and 5.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conley et al. USPN 6,353,761 B1 in view of Esler USPN 6,128,529 as applied to claim 1 above, and further in view of Struble et al. USPN 6,081,748.

2. As discussed in paragraph 1 of this action, Conley et al. as modified in view of Esler discloses the claimed invention except for the rate and synchronized channels being right and left ventricular channels (claim 2), the rate and synchronized channels being right and left atrial channels (claim 3), and the pacemaker being operated with a plurality of synchronized channels and further comprising displaying markers for each such channel (claim 4). Struble et al. teaches a cardiac pacing system using right and left atrial channels or leads 16 and 22 (Fig 2) and right and left ventricular channels or leads 32 and 42 (Fig 3), wherein left atrial and ventricular channels 22 and 42 are read as a plurality of synchronized channels. It would have been obvious to one having ordinary skill in the art at the time of the invention to have combined the cardiac pacing system of Struble with the cardiac rhythm management system of Conley in view of Esler. The motivation for doing so would have been to provide synchronous pacing to at least the two upper heart chambers, the two lower heart chambers, three heart chambers, or to all four heart chambers (c 1, l 19-23). It would have also been obvious to one of ordinary skill in the art at the time the invention was made to display markers for each synchronized channel in a plurality of synchronized channels since it has been held that it is obvious to provide adjustability where it is needed. *In re Stevens*, 212 F.2d 197, 101 USPQ 284 (CCPA 1954). In this case, one of ordinary skill in the art would have recognized the desirability to display markers for each synchronized channel for identification or observational purposes. Therefore, it would have been obvious to combine Conley in view of Esler with Struble to obtain the invention as specified in claims 2-4.

Art Unit: 3762

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to displaying markers for cardiac event intervals:

USPN 5,372,607 to Stone et al.

USPN 6,129,745 to Sun et al.

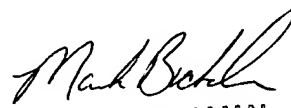
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne Yu whose telephone number is 703-305-7569. The examiner can normally be reached on Monday-Friday, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 703-308-5181. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.



JCY
December 19, 2002


MARK BOCKELMAN
PRIMARY EXAMINER